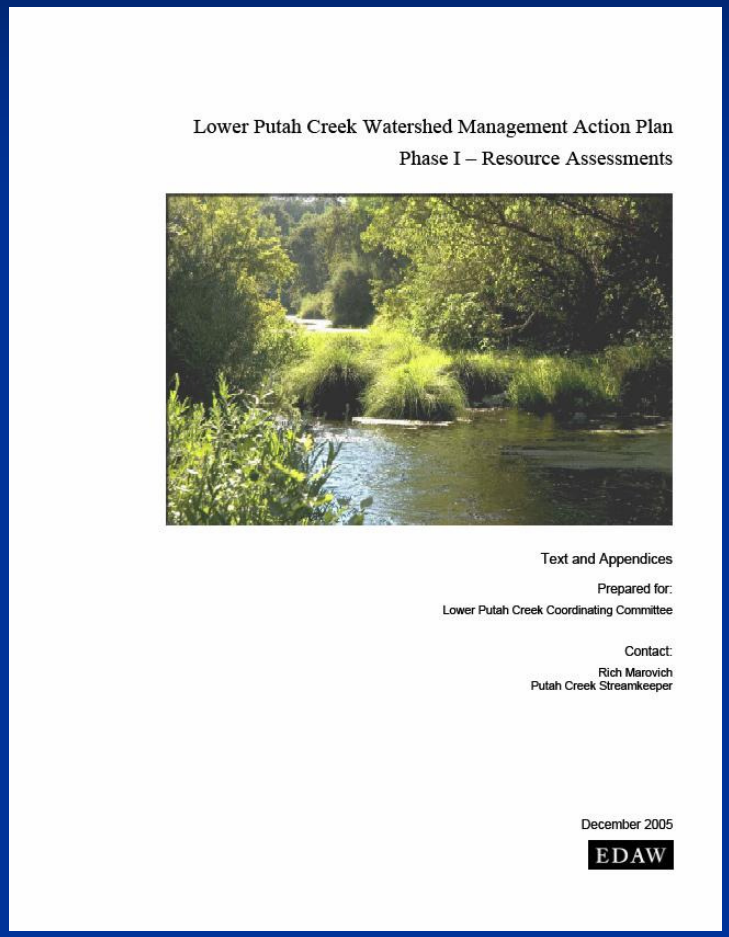
Lower Putah Creek
Community Watershed Management

Watershed Plan

Science-based and Community Supported


Lower Putah Creek Watershed Management Action Plan

Phase I – Resource Assessments

Text and Appendices

Prepared for:

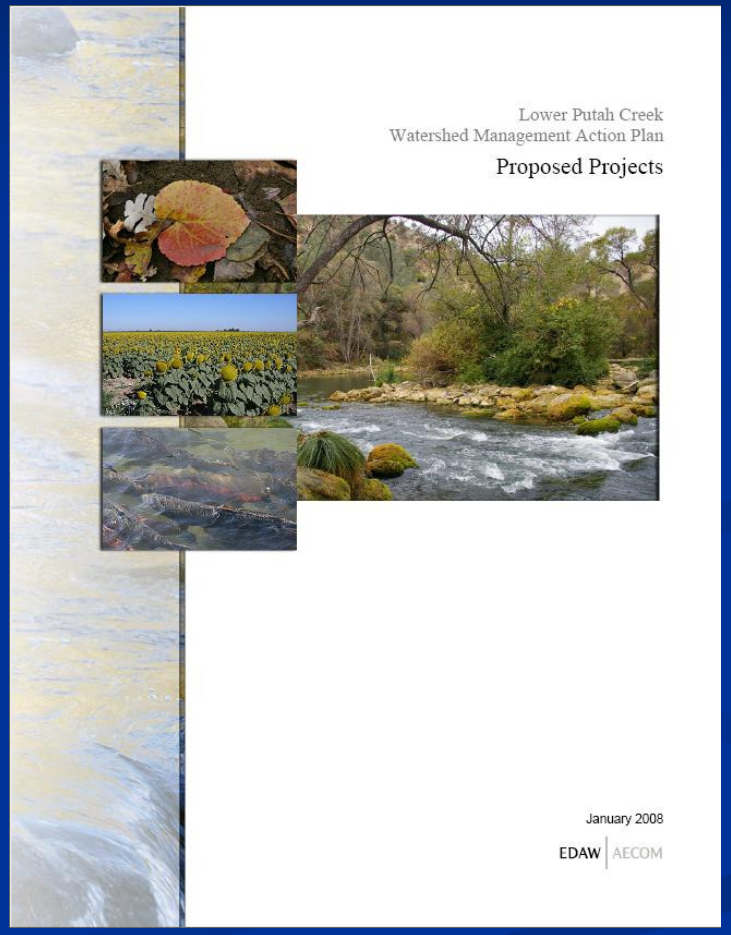
Lower Putah Creek Coordinating Committee

Contact:

Rich Marovich
Putah Creek Streamkeeper

December 2005

EDAW

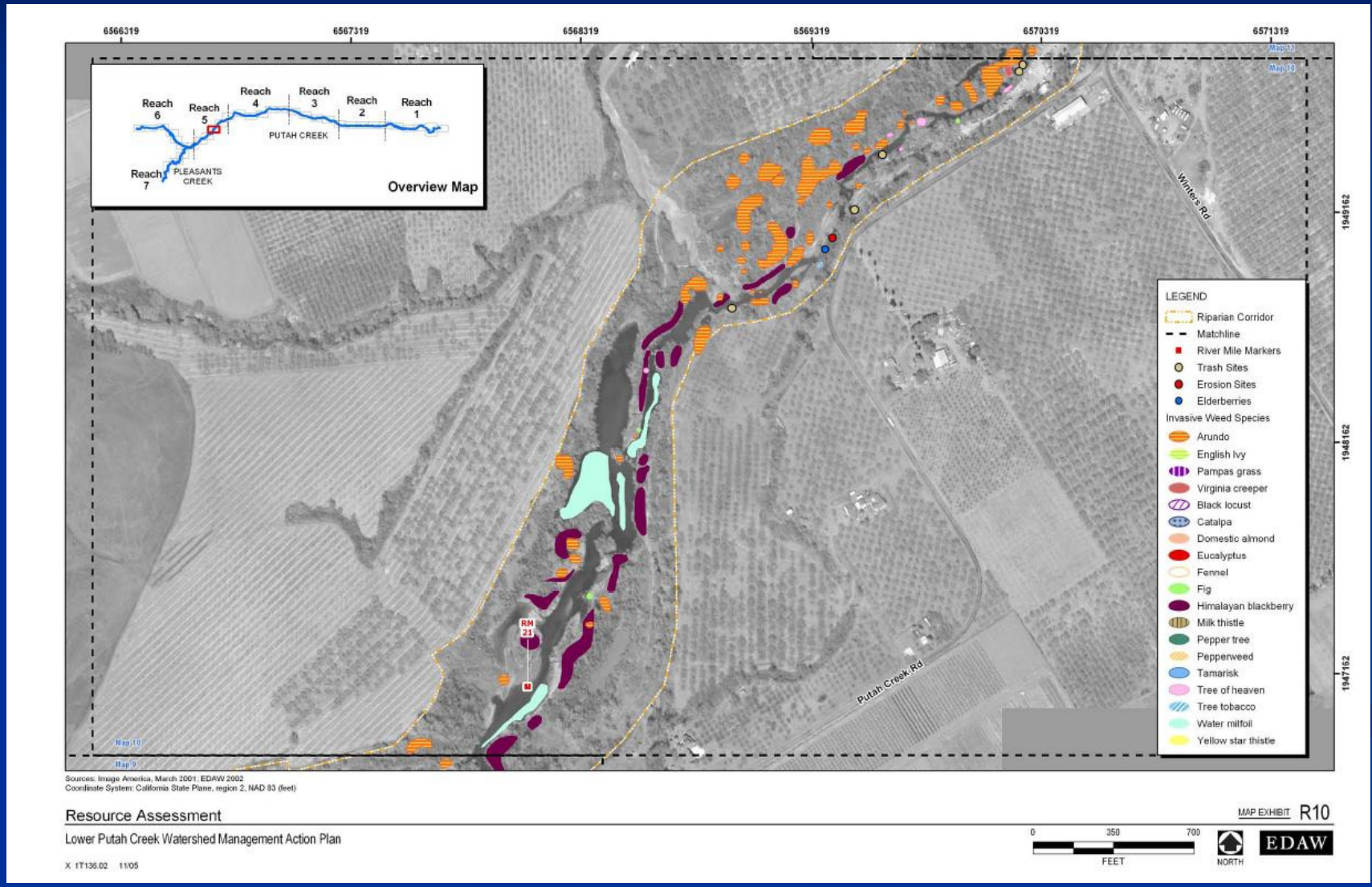

Lower Putah Creek
Watershed Management Action Plan

Proposed Projects

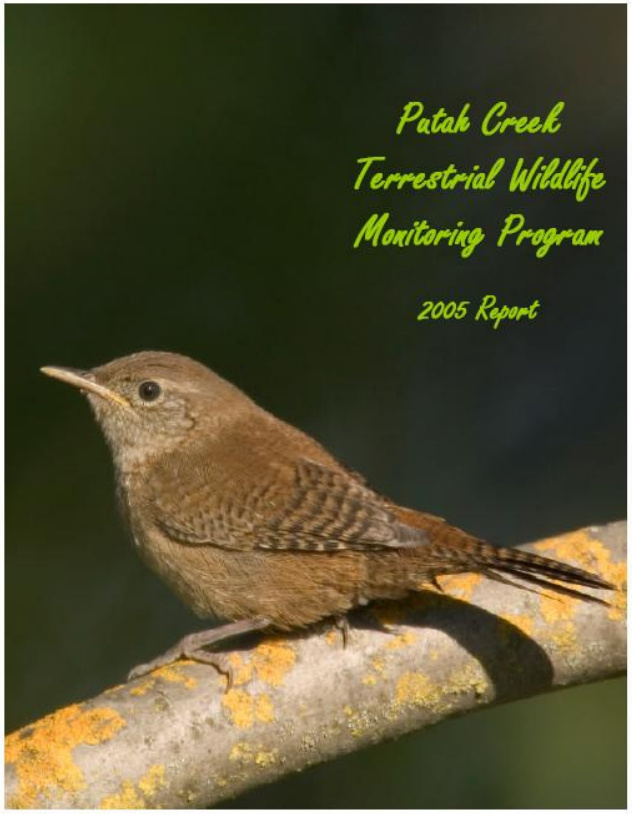
January 2008

EDAW | AECOM

Watershed Scale Assessment



Wildlife Monitoring

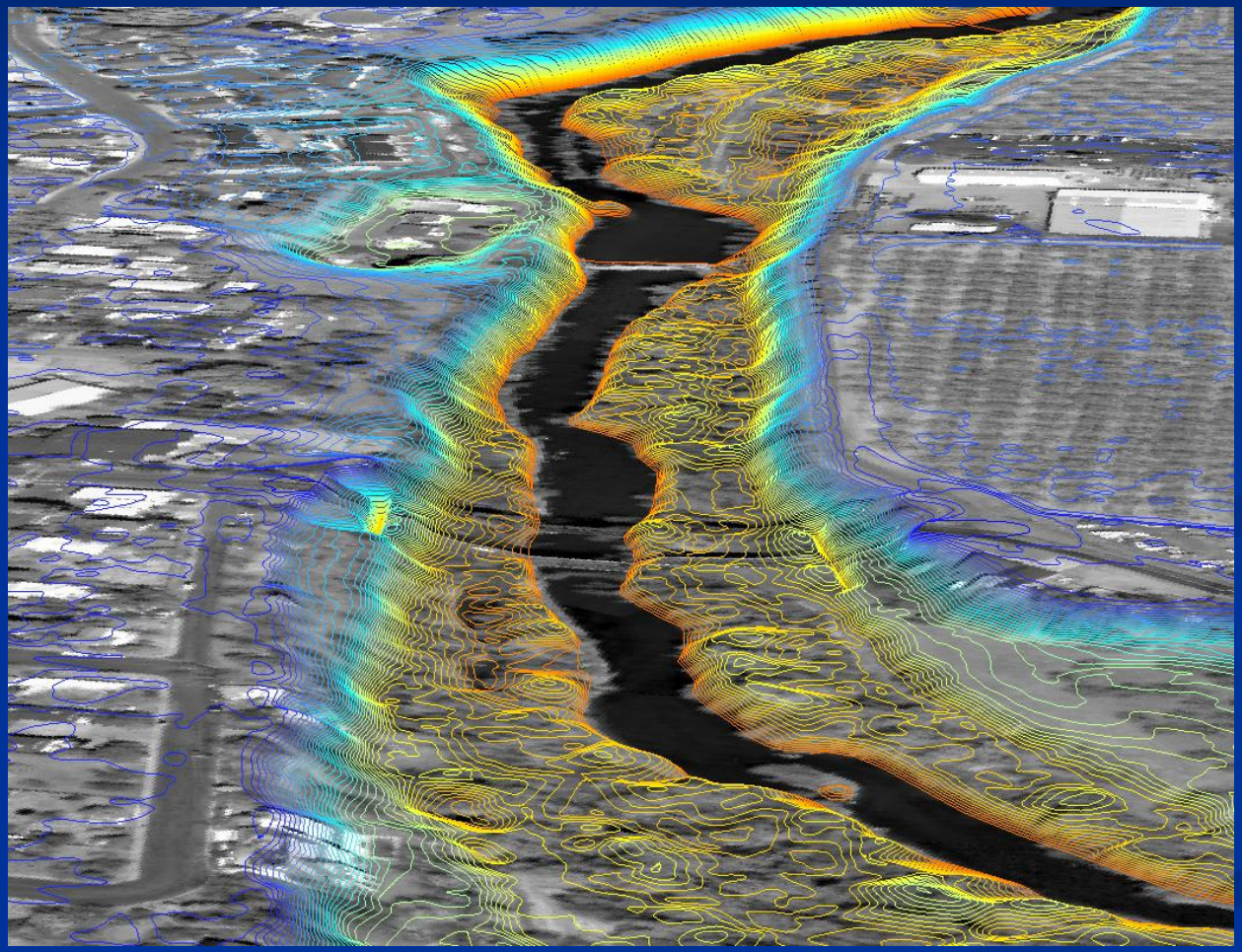


Bird Counts by River Mile

Putah Creek Riparian Bird and Wildlife Monitoring Program
2005 Summary Progress Report

SPECIES	CREEK LIST		7	8	9	10	11	12	13	14	15	16
Yellow-headed Blackbird		4										
Brewer's Blackbird		21	PR	OB	CO	OB	CO		PO	PO	OB	
Brown-headed Cowbird		22	PR	PR	PR	PR	PR		PR	PR		
Hooded Oriole		6			OB	OB						
Bullock's Oriole		20	CO	OB	OB	CO	PR		PO	PR		
FRINGILLIDAE												
Purple Finch		13	OB	OB	OB	OB	OB		OB	OB	OB	
House Finch		26	CO	PO	OB	PR	CO	OB	PR	PR	OB	PO
Pine Siskin		9	OB			OB				OB		
Lesser Goldfinch		21	PO	PO	OB	PR	PR	OB	PO	PR	OB	
American Goldfinch		25	PO	PO	OB	CO	PO	OB	PO	PO	OB	OB
Lawrence's Goldfinch		7				OB						
PASSERIDAE												
House Sparrow		12	CO	CO			CO		PR		OB	
TOTAL OB			86	64	60	75	61	21	33	65	32	21
TOTAL PO			13	15	15	13	8	6	15	14	2	14
TOTAL PR			14	11	19	19	16	1	12	21	4	11
TOTAL CO			21	10	8	29	23	4	12	14	0	7
GRAND SPP TOTAL		**199**	**134**	**100**	**102**	**136**	**108**	**32**	**72**	**114**	**38**	**53**

LiDAR Elevation Model



Community Participation

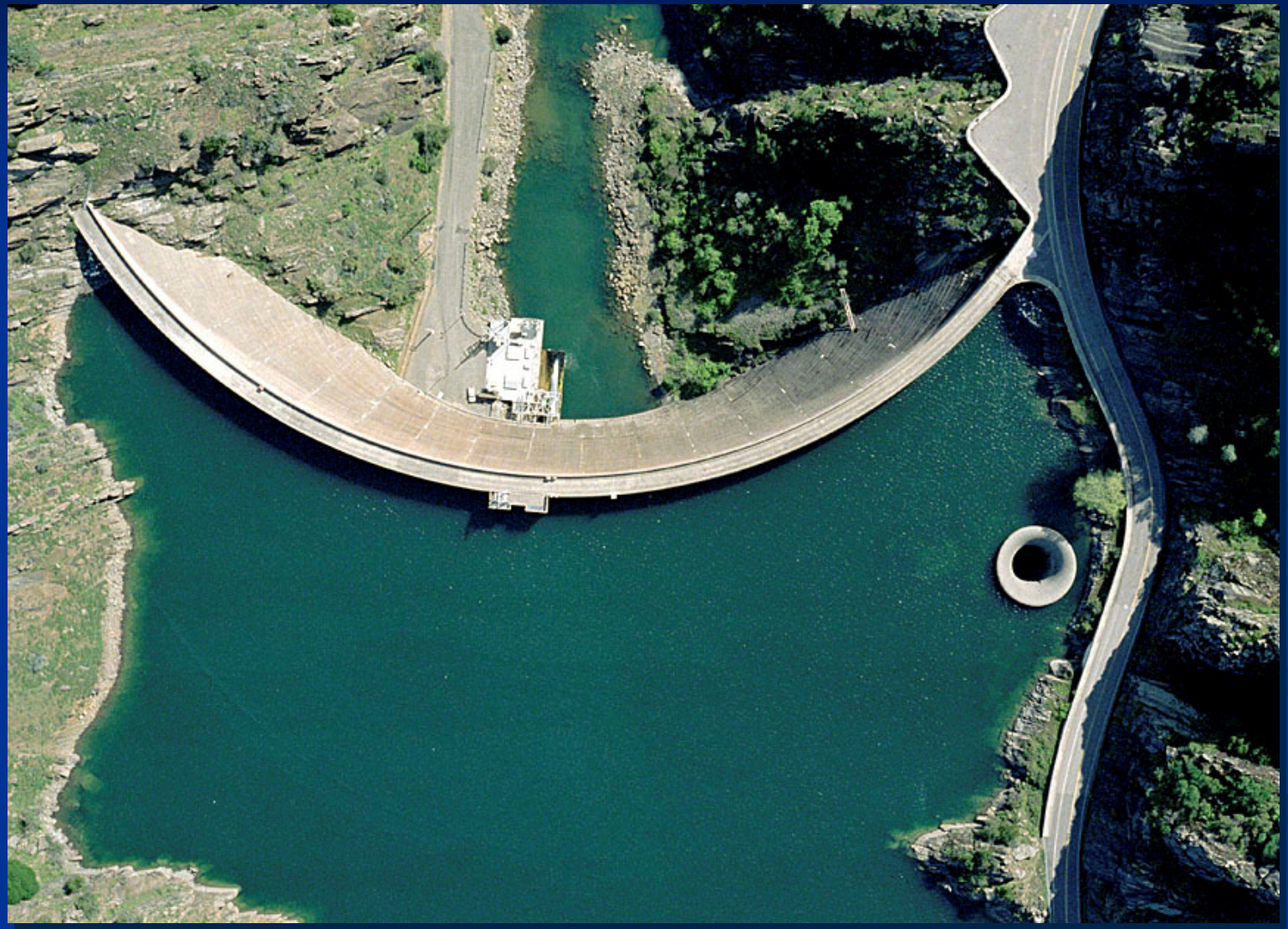
Priority Project List

Proposed Action Plan Projects

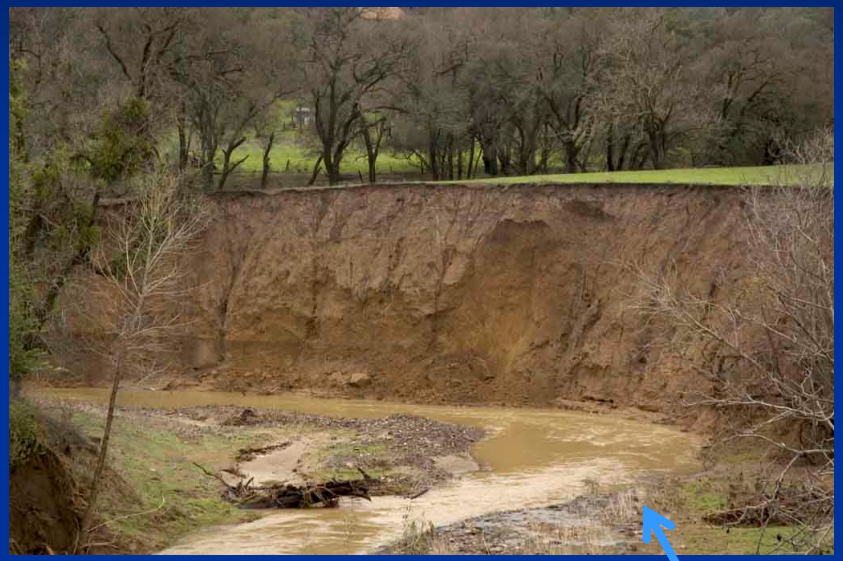
	Project by Property Owner	Project Types					Selection Criteria						Notes
		Channel Restoration	Bank Stabilization	Habitat Enhancement	Invasive Plant Removal	Trash Clean-up	Existing Agreement (Cooperation & Commitment)	On-site Materials	Multiple Funding Sources	Contiguous with Other Projects	Public Education and Visibility	Upstream Location	
TIER ONE PROJECTS	Winters Putah Creek Park	•	•	•	•	•	•	•	•	•	•	•	1 mile reach from Winters Car Bridge to Hwy 505
	Carl Ramos	•	•	•	•	•	•	•	•	•	•	•	Dry Creek confluence
	Ken Bertinoia	•	•	•	•	•	•	•	•	•	•	•	Dry Creek confluence
	Herb Wimmer		•	•	•	•	•	•	•	•		•	Winters Oxbow
	Tony Morales		•	•	•	•	•	•	•	•		•	Below Putah Diversion Dam
	Dennis Kilkenny	•		•	•	•	•	•	•	•	•		Putah Creek Road east of Hwy 505
	Craig McNamara	•		•	•	•	•	•	•	•	•		Largest parcel on Putah Creek
	Yolo Housing	•	•	•	•	•	•	•	•		•		Low income housing–CALFED Prop 13
	UC Davis Russell Ranch	•		•	•	•	•	•	•	•	•		Above Stevenson's Bridge
	UC Davis Campus	•		•	•	•	•	•	•	•	•		Pedrick Road to Old Davis Road
	City of Davis	•		•	•	•	•	•	•	•	•		Below Mace Blvd.
	Solano County 505	•	•	•		•	•	•	•	•	•		South Bank Hwy 505 and east
	Ethel Hoskins		•		•	•	•	•	•		•	•	First arundo control and bank stabilization project
	Don Jordan			•	•	•	•	•	•				Above Stevenson's Bridge
	John Neil	•		•	•	•		•	•	•	•	•	27 acres above Winters Car Bridge
	Glide Ranch	•		•	•	•		•	•	•			2.5 miles north bank creek frontage
	John Hasbrook	•		•	•		•	•	•	•			Original Rock Weir
	John Pickerel			•	•	•	•			•	•	•	Below Putah Diversion Dam
	John Vickrey	•	•		•	•	•		•	•			Riparian restoration after fire

Committed Action

Understanding the Watershed



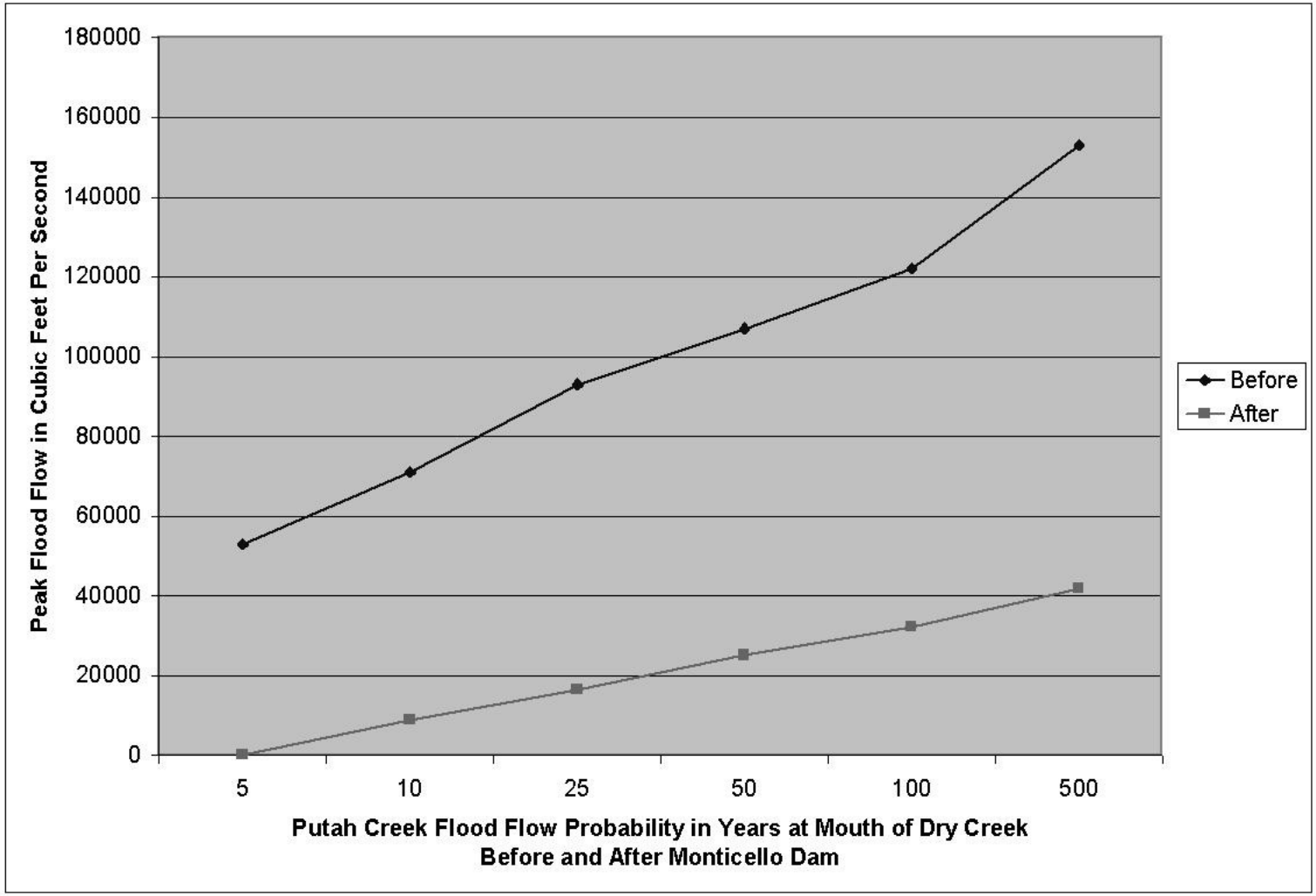
Why Are Tributaries Eroding?



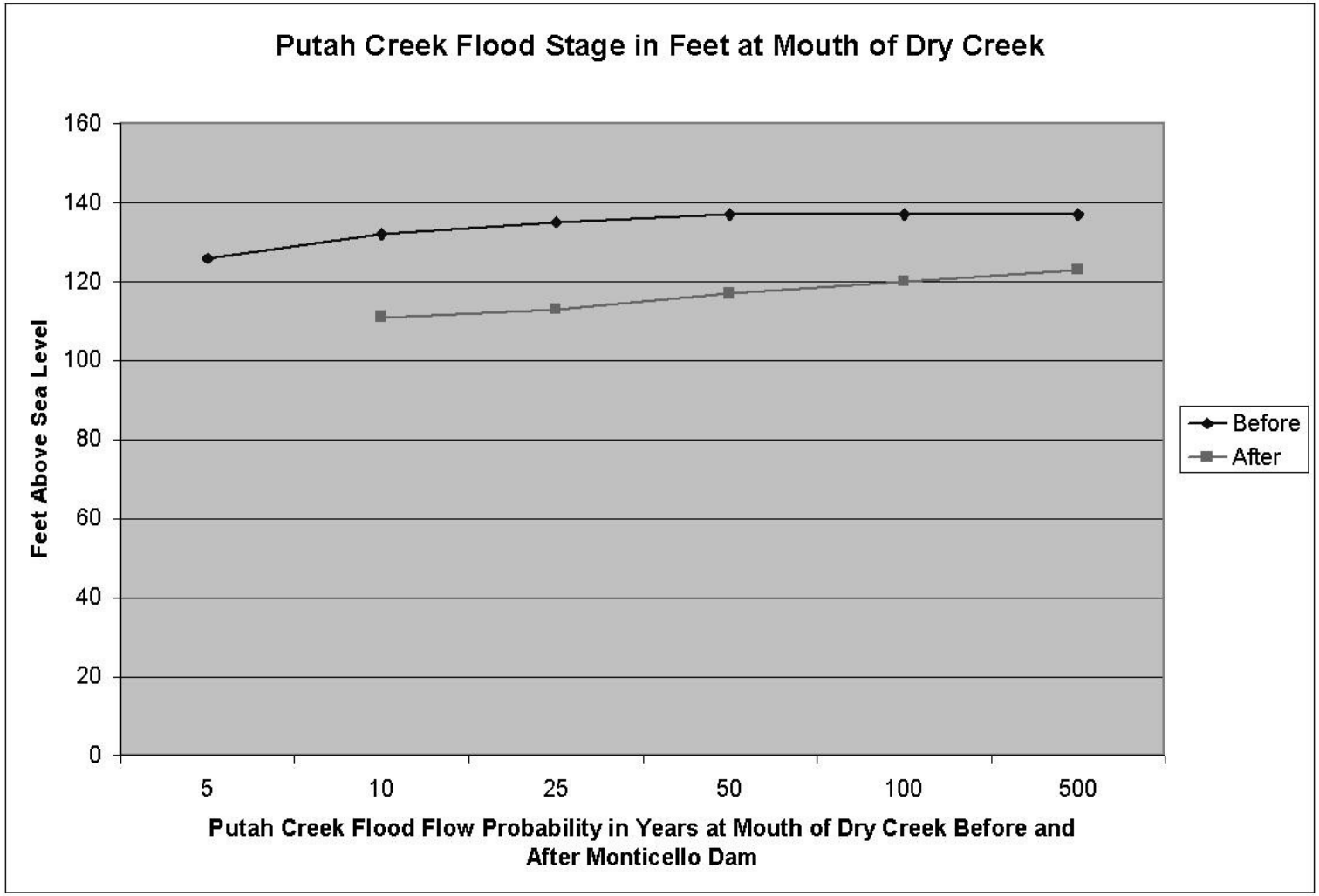
Pleasants Creek

Dry Creek

Effect of Monticello Dam on Peak Flood Flows



Effect of Monticello Dam on Peak Flood Stage



Enlarging Tributary Channels

Bridge Failure

Turbidity


HACH
2100AN Turbidimeter
2772 NTU
Range Mode
AUTO
EDIT
ENTER
SAMPLE
SETUP
CAL
Zero
MODE
RANGE
UNITS
RATIO
FLOW
SIGNAL AVG
PRINT
LINE FEED

June 2005

January 2006

Hoskins Ranch 2001

Hoskins Ranch 2005

Rock Vanes

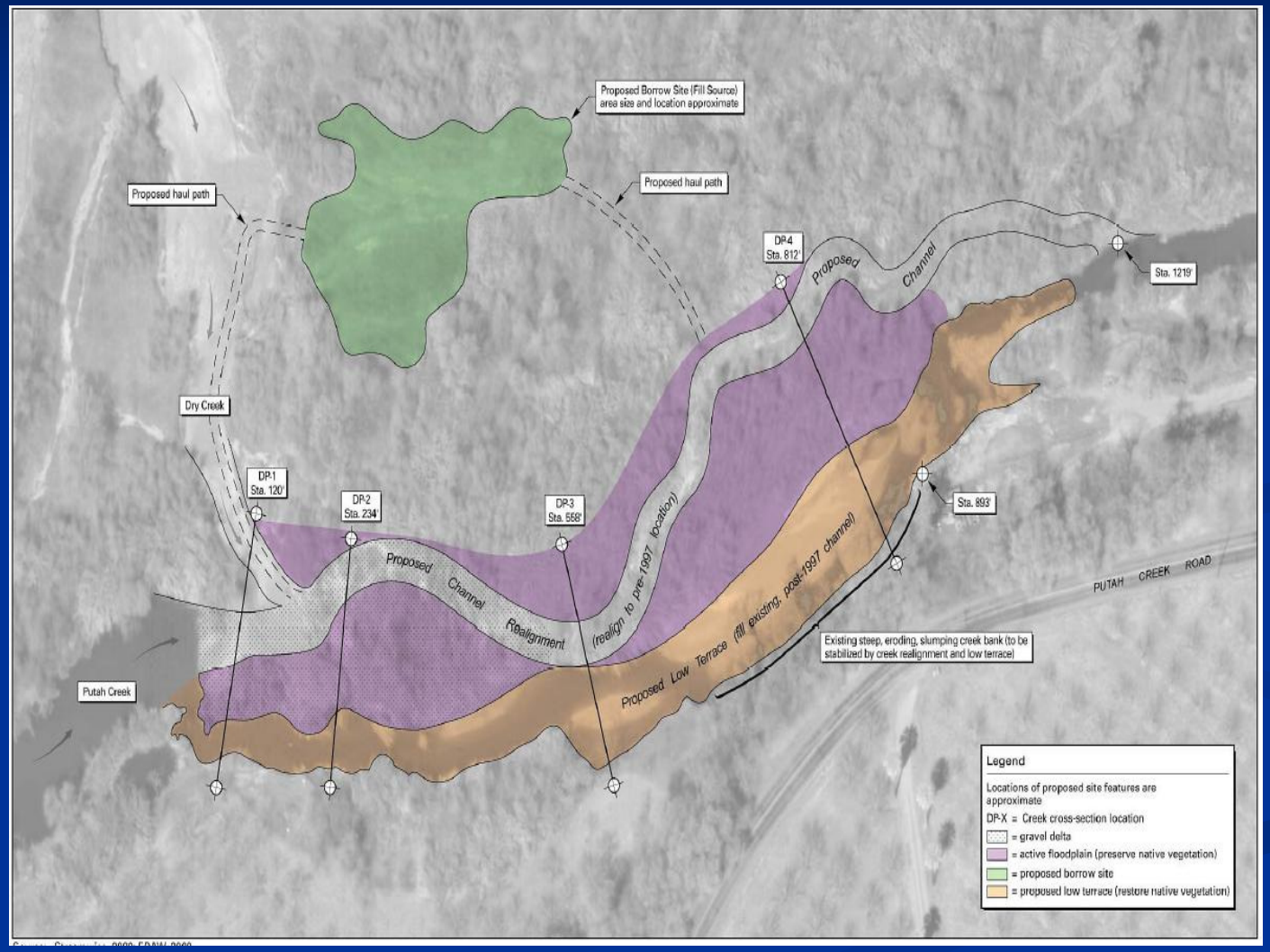
Dry Creek


YOLO
COUNTY
Monticello
Dam
Lake
Berryessa
Winters
Putah
Creek
Putah
Diversion Dam
Putah
South Canal
Dry
Creek
Pleasants
Creek
Dixon
Davis
West
Sacramento
Los Rios
Check Dam
South Fork Putah Creek
Putah
Creek
Sinks
Putah Creek Rd
Russell Blvd
Covell Rd
Stevens Rd
Midway Rd
Willow Slough
Channel
NAPA
COUNTY
SOLANO

Cut Arundo at Dry Creek

Arundo Induced Erosion

Restoring Dry Creek Confluence

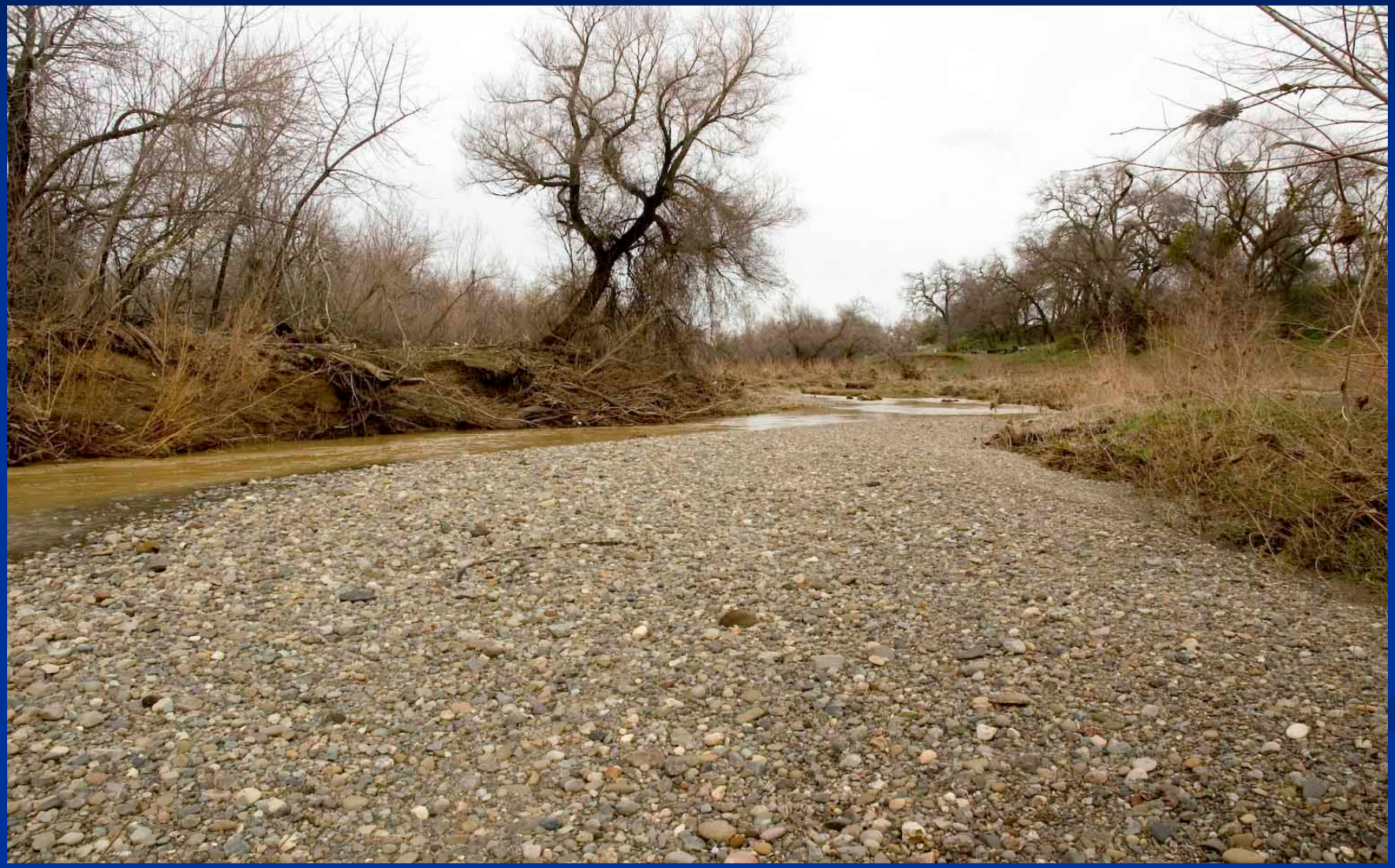


Design Channel

Restored Bank

After 12,500 CFS Runoff Event

Gravel Recharge 2008



Winters Putah Creek Park

WPCP 1962

Winters Putah Creek Park
Conceptual Restoration Plan

Success Criteria

- Near Term (1-5 years)
  - Eliminate Blight
  - Eliminate Invasive Weeds
  - Increase Aquatic Invertebrates
- Mid Term (3-7 years)
  - Lower Water Temperature
  - Reduce Turbidity
  - Increase Salmon Population
- Long Term (7-10 years)
  - Increase Native Fish and Wildlife

Conclusions

1)Communities manage watersheds

2)Community involvement, watershed scale assessment and consensus planning generates commitment to science-based and community-supported action.

http://www.watershedportals.org/lpccc